

ETSI EN 319 522-4-2 V1.1.1 (2018-09)



EUROPEAN STANDARD

**Electronic Signatures and Infrastructures (ESI);  
Electronic Registered Delivery Services;  
Part 4: Bindings;  
Sub-part 2: Evidence and identification bindings**

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**Reference**

DEN/ESI-0019522-4-2

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**Keywords**

e-delivery services, registered e-delivery services, registered electronic mail

**ETSI**

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## Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Electronic Signatures and Infrastructures (ESI).

The present document is part 4, sub-part 2 of a multi-part deliverable. Full details of the entire series can be found in part 1 [i.1].

<b>National transposition dates</b>	
Date of adoption of this EN:	23 August 2018
Date of latest announcement of this EN (doa):	30 November 2018
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2019
Date of withdrawal of any conflicting National Standard (dow):	31 May 2019

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## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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# 1 Scope

The present document specifies the binding of the Electronic Registered Delivery (ERD) evidence and identification, whose semantics is defined in ETSI EN 319 522-2 [1] and whose format is defined in ETSI EN 319 522-3 [2], to the specific transmission protocol AS4 [6].

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## 2 References

### 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI EN 319 522-2: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 2: Semantic Contents".
- [2] ETSI EN 319 522-3: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 3: Formats".
- [3] ETSI EN 319 522-4-1: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 4: Bindings; Sub-part 1: Message delivery bindings".
- [4] ETSI EN 319 532-3: "Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 3: Formats".
- [5] OASIS: "ebXML Messaging Services Version 3.0: Part 1, Core Features", Committee Specification, 02 July 2007.
- [6] OASIS: "AS4 Profile of ebMS 3.0 Version 1.0", OASIS Standard, January 2013.
- [7] IETF RFC 5322: "Internet Message Format".

### 2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI EN 319 522-1: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 1: Framework and Architecture".

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## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in ETSI EN 319 522-1 [i.1] apply.

### 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in ETSI EN 319 522-1 [i.1] apply.

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## 4 Message delivery bindings - general concepts

The present document specifies the bindings of evidence and identification information which flows through the interface ERDS-RI to specific protocols, when they travel decoupled from the user content they are related to.

As defined in ETSI EN 319 522-2 [1], the ERDS-RI interface allows for the exchange of ERD messages (ERD dispatch, ERD payload, ERDS receipt, ERDS serviceInfo). Specific formats for these objects shall be supported as defined in ETSI EN 319 522-3 [2].

Evidence and identification information, when not associated to the user content, form an ERD receipt.

Clause 5 specifies the mapping of ERDS receipts to AS4 [6]. Clause 6 defines the binding to IETF RFC 5322 [7] through ETSI EN 319 532-3 [4].

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## 5 AS4 binding

### 5.1 Introduction

This clause provides a specification for the exchange of an **ERDS receipt** between two ERDS, i.e. the implementation of the relay operation, using the AS4 message exchange protocol [6]. This binding specification consists of one clause defining the ERDS receipt binding, and one clause describing the generic requirements that apply to all bindings.

The configuration of an ebMS V3/AS4 [6] message exchange is done using P-Modes, short for processing modes. A P-Mode, specified in section 4 of the ebMS version 3 Core Specification [5], is a set of parameters each specifying a specific detail of the message exchange, e.g. the identifiers of the sender and receiver and the signing algorithm. When parties are going to set up a message exchange they need to agree on the P-Mode(s) to use.

### 5.2 Generic requirements

The generic requirements defined in ETSI EN 319 522-4-1 [3], clause 5.2, shall apply to ERDS receipt.

### 5.3 Binding of ERDS receipts

When relaying an ERDS receipt using AS4 [6] the sending ERDS shall use <http://uri.etsi.org/19522/v1#/as4binding/Actions/ERDSreceipt> as value for PMode[1].Action.

In addition to the payload containing the ERDS Relay metadata the message shall include one or more payloads containing the ERDS evidence(s).

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## 6 IETF RFC 5322 binding

This binding shall be as provided by ETSI EN 319 532-3 [4].

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# History

<b>Document history</b>		
V1.0.0	May 2018	EN Approval Procedure AP 20180823: 2018-05-25 to 2018-08-23
V1.1.1	September 2018	Publication